

Response  
Serial No. 10/156,441

Docket No. GB010100

**IN THE CLAIMS:**

1. (Previously Presented) A method of receiving a signal propagated over a signal channel, comprising receiving and demodulating the signal, equalising the demodulated signal in a first operation to counter a first type of distortion and in a second operation equalising the signal from the first operation to counter a second type of distortion, and storing training sequences for respective couples of transmitting and receiving equipments and by selecting the optimum training sequence for a currently used couple of transmitting and receiving equipments.
2. (Original) A method as claimed in claim 1, characterised in that the equalisation in the first operation is to counter distortion introduced by the signal channel.
3. (Original) A method as claimed in claim 1, characterised in that the equalisation in the first operation is to counter intersymbol interference (ISI).
4. (Previously Presented) A method as claimed in claim 2, characterised in that the equalisation in the second operation is to counter distortions introduced by transmitting and receiving equipments.
5. (Original) A method as claimed in claim 4, characterised by training an equalising stage used in the first operation using a first training sequence which includes the non-linear characteristics present in the transmitting and receiving equipment.
6. (Previously Presented) A method as claimed in claim 4, characterised by training an equalising stage used in the second operation using a second training sequence which counters the non-linear characteristics present in the transmitting and receiving equipment.
7. (Cancelled)

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8. (Currently Amended) A receiver comprising means for receiving a signal propagated over a signal channel, means for demodulating the received signal, a first equalising stage coupled to the demodulating means for countering a first type of distortion and a second equalising stage coupled to the first equalising stage for countering a second type of distortion, wherein the first equalising stage includes means for storing a first training sequence and the second equalising stage includes means for storing a second training sequence and means for storing a plurality of the first and second training sequences for respective couples comprising the receiver with different transmitters and means for selecting an optimum training sequence for a currently used couple.

9-10 (Cancelled).

11 (New) A method of receiving a signal propagated over a signal channel, the method comprising the steps of:

receiving and demodulating the signal;

equalising the demodulated signal to counter a first type of distortion, the first type of distortion including intersymbol interference; and

re-equalising the equalized signal to counter a second type of distortion, the second type of distortion including non-linear distortions.